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ABSTRACT OF THE INVENTION

Automatic compilation of address filter information that permits a cable modem to appropriately route incoming data packets to destination devices is described. Cable modems use address filter information to identify incoming data packets that are addressed to communication devices associated with the cable modem. The address filter information might be, for example, a list of addresses of communication devices that have previously registered with the cable modem. On occasion, the cable modem may have incorrect or insufficient or incomplete filter information when, for instance, a new communication device is added to a group of networked communication devices associated with the cable modem. In order to automatically recognize associated communication devices that are to be registered with the cable modem, a cable modem driver inspects the source address of outgoing data packets. If the source address is not included in the address filter information, the source address is added to the address filtering information. Subsequently, if an incoming data packet addresses the associated communication device, the cable modem driver allows the data packet to be passed through to the communication device.

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